

## **REMARKS**

Claims 1-24 and 36-39 are now pending in the application, and claims 25-35 are withdrawn from consideration. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

### **REJECTION UNDER 35 U.S.C. § 102**

Claims 1-5, 8 and 18-21 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Ranney (U.S. Pat. No. 5,213,788). This rejection is respectfully traversed.

#### **Claim 1**

At the outset, the Applicant submits that the amendments to claim 1 has rendered the above rejection moot. Claim 1 has been amended to include the subject matter of claim 24, to clarify that the non-magnetically responsive layer around the core includes hydrophobic polymer chains that are on the outside of the coating, which feature. The large hydrophobic portion is on the outside of the coated particle when attached to the magnetic core, and as such 'camouflages' the particle such that the coated particle initially display hydrophobic properties. At a subsequent point, the hydrophobic polymer portion may be cleaved from the coating, to separate the magnetically responsive particle with hydrophilic functionality. (See paragraph 0052 of the presently published patent application 20040157082).

Contrary to Ranney, claim 1 teaches an outer layer that is hydrophobic. The presently claimed hydrophobic polymer coating feature allows the embolic material to retain the interfacial tension required to keep the magnetically responsive particles together when pulled by a magnetic gradient, which hydrophobic polymer portion may

then be cleaved or degraded to yield a hydrophilically-coated magnetic particle which may then be removed by renal excretion, for example. (See paragraph 0052 of the presently published patent application 20040157082).

Ranney specifically teaches that the preferred polymer coating for the paramagnetic particles are hydrophyllic, which is required to provide the necessary environment for reliable NMR results. (See Ranney, column 13, lines 34-36) As such, Ranney specifically teaches away from the use of hydrophobic polymer coatings as in presently amended claim 1. Thus, Ranney does not anticipate an embolic material comprising a plurality of magnetically responsive particles having a non-magnetically responsive layer around the core, an outside portion of which includes hydrophobic polymer chains. As such, the Applicant submits that amended claim 1 is allowable for at least these reasons.

With regard to claims 2-5, 8 and 18-21, these claims ultimately depend from independent base claim 1, which the Applicant believes to be allowable in view of the above remarks. As such, the Applicant submits that claims 2-5, 8 and 18-21, by virtue of their dependence from claim 1, are also allowable for at least these reasons.

#### **REJECTION UNDER 35 U.S.C. § 103**

Claims 1-24 and 36-39 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ranney (U.S. Pat. No. 5,213,788) in view of Garibaldi et al (U.S. Pat. No. 6,364,823). This rejection is respectfully traversed.

#### **Claims 1 and 36**

At the outset, the Applicant submits that the amendments to claims 1 and 36 have rendered the above rejection moot. Claims 1 and 36 have been amended to include the subject matter of claim 24, to clarify that the non-magnetically responsive layer around the core includes hydrophobic polymer chains that are on the outside of the coating, which feature. The large hydrophobic portion is on the outside of the coated particle when attached to the magnetic core, and as such 'camouflages' the particle such that the coated particle initially display hydrophobic properties. At a subsequent point, the hydrophobic polymer portion may be cleaved from the coating, to separate the magnetically responsive particle with hydrophilic functionality. (See paragraph 0052 of the presently published patent application 20040157082).

Contrary to Ranney, claims 1 and 36 teach an outer layer that is hydrophobic. The presently claimed hydrophobic polymer coating feature allows the embolic material to retain the interfacial tension required to keep the magnetically responsive particles together when pulled by a magnetic gradient, which hydrophobic polymer portion may then be cleaved or degraded to yield a hydrophilically-coated magnetic particle which may then be removed by renal excretion, for example. (See paragraph 0052 of the presently published patent application 20040157082).

Ranney specifically teaches that the preferred polymer coating for the paramagnetic particles are hydrophilic, which is required to provide the necessary environment for reliable NMR results. Accordingly, Ranney specifically teaches away from the use of hydrophobic polymer coatings as in presently amended claims 1 and 36. Thus, Ranney does not teach or suggest an embolic material comprising a plurality of magnetically responsive particles having a non-magnetically responsive layer around

the core, an outside portion of which includes hydrophobic polymer chains. Garibaldi also does not teach or suggest an embolic material comprising a plurality of magnetically responsive particles having a non-magnetically responsive layer around the core, an outside portion of which includes hydrophobic polymer chains. As such, the Applicant submits that claims 1 and 36 as presently amended are distinguished from Ranney and Garibaldi, and are allowable for at least these reasons.

With regard to claims 2-23 and 37-39, these claims ultimately depend from independent base claims 1 or 36, which the Applicant believes to be allowable in view of the above remarks. As such, the Applicant submits that claims 2-23 and 37-39, by virtue of their dependence from claims 1 or 36, are also allowable for at least these reasons.

#### **NEW CLAIMS**

The Applicant has also added claim 40 to cover features of the thickness and function of the polymer coating as disclosed in the present application. (See paragraph 0036 of the presently published patent application 20040157082).

#### **CONCLUSION**

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and

favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (314) 726-7500.

Respectfully submitted,

Dated: Oct 4, 2006

By: Kevin Pumm  
Kevin Pumm, Reg. No. 49,046

HARNESS, DICKEY & PIERCE, P.L.C.  
7700 Bonhomme, Suite 400  
St. Louis, Missouri 63105  
(314) 726-7500